10/672,465

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1204bxd

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	SEP 09	CA/CAplus records now contain indexing from 1907 to the present
NEWS 4	DEC 08	INPADOC: Legal Status data reloaded
NEWS 5	SEP 29	DISSABS now available on STN
NEWS 6	OCT 10	PCTFULL: Two new display fields added
NEWS 7	OCT 21	BIOSIS file reloaded and enhanced
NEWS 8	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 9	NOV 24	MSDS-CCOHS file reloaded
NEWS 10	DEC 08	CABA reloaded with left truncation
NEWS 11	DEC 08	IMS file names changed
NEWS 12	DEC 09	Experimental property data collected by CAS now available in REGISTRY
NEWS 13	DEC 09	STN Entry Date available for display in REGISTRY and CA/CAplus
NEWS 14	DEC 17	DGENE: Two new display fields added
NEWS 15	DEC 18	BIOTECHNO no longer updated
NEWS 16	DEC 19	CROPU no longer updated; subscriber discount no longer available
NEWS 17	DEC 22	Additional INPI reactions and pre-1907 documents added to CAS databases
NEWS 18	DEC 22	IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 19	DEC 22	ABI-INFORM now available on STN
NEWS 20	JAN 27	Source of Registration (SR) information in REGISTRY updated and searchable
NEWS 21	JAN 27	A new search aid, the Company Name Thesaurus, available in CA/CAplus
NEWS 22	FEB 05	German (DE) application and patent publication number format changes
NEWS 23	MAR 03	MEDLINE and LMEDLINE reloaded
NEWS 24	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS 25	MAR 03	FRANCEPAT now available on STN

NEWS EXPRESS	MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 17:53:05 ON 10 MAR 2004

=> fil rg
'RG' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'HOME'
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.

=> fil reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 17:53:31 ON 10 MAR 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 MAR 2004 HIGHEST RN 660815-69-0
DICTIONARY FILE UPDATES: 9 MAR 2004 HIGHEST RN 660815-69-0

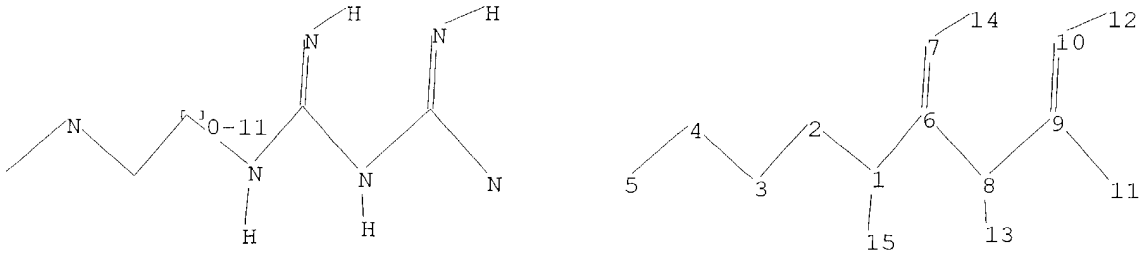
TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\Program Files\Stnexp\Queries\10672465.str



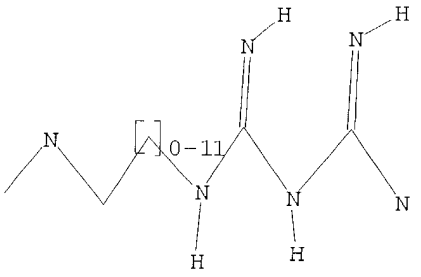
chain nodes :
1 2 3 4 6 7 8 9 10 11 12 13 14 15
ring/chain nodes :
5
chain bonds :
1-2 1-6 1-15 2-3 3-4 4-5 6-7 6-8 7-14 8-9 8-13 9-10 9-11 10-12

exact/norm bonds :
1-2 1-6 3-4 4-5 6-7 6-8 8-9 9-10 9-11
exact bonds :
1-15 2-3 7-14 8-13 10-12

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

L1 STRUCTURE UPLOADED

=> d query
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 17:53:52 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 119 TO ITERATE

100.0% PROCESSED 119 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1726 TO 3034
PROJECTED ANSWERS: 656 TO 1544

L2 50 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 17:53:57 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2471 TO ITERATE

100.0% PROCESSED 2471 ITERATIONS 964 ANSWERS
SEARCH TIME: 00.00.01

L3 964 SEA SSS FUL L1

=> fil caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.42	155.63

FILE 'CAPLUS' ENTERED AT 17:54:15 ON 10 MAR 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 10 Mar 2004 VOL 140 ISS 11
FILE LAST UPDATED: 9 Mar 2004 (20040309/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3
L4 3969 L3

=> fil reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.31	156.94

FILE 'REGISTRY' ENTERED AT 17:55:59 ON 10 MAR 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 MAR 2004 HIGHEST RN 660815-69-0
DICTIONARY FILE UPDATES: 9 MAR 2004 HIGHEST RN 660815-69-0

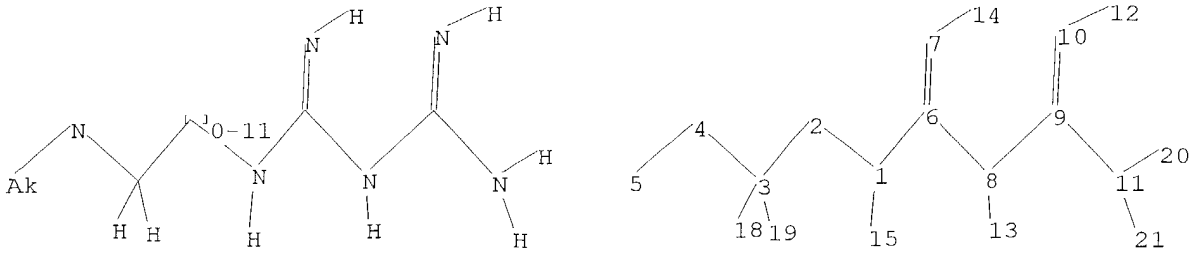
TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\Program Files\Stnexp\Queries\10672465a.str

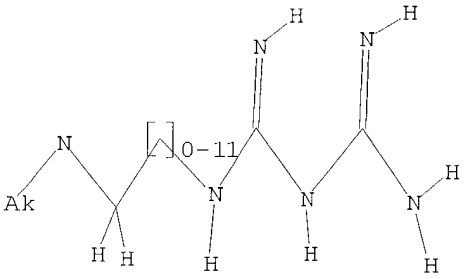


chain nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 18 19 20 21
chain bonds :
1-2 1-6 1-15 2-3 3-4 3-18 3-19 4-5 6-7 6-8 7-14 8-9 8-13 9-10 9-11
10-12 11-20 11-21
exact/norm bonds :
1-2 1-6 3-4 4-5 6-7 6-8 8-9 9-10 9-11
exact bonds :
1-15 2-3 3-18 3-19 7-14 8-13 10-12 11-20 11-21

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 18:CLASS 19:CLASS
20:CLASS 21:CLASS

L5 STRUCTURE UPLOADED

=> d query
L5 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l5
SAMPLE SEARCH INITIATED 17:56:16 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 125 TO ITERATE

100.0% PROCESSED 125 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1830 TO 3170

PROJECTED ANSWERS: 624 TO 1496

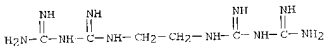
L6 50 SEA SSS SAM L5

=> d scan

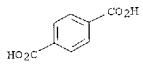
L6 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Terephthalic acid, polymer with 1,1'-ethylenebis[biguanide] (8CI)
MF (C8 H6 O4 . C6 H16 N10)x
CI PMS

RELATED POLYMERS AVAILABLE WITH POLYLINK

CM 1

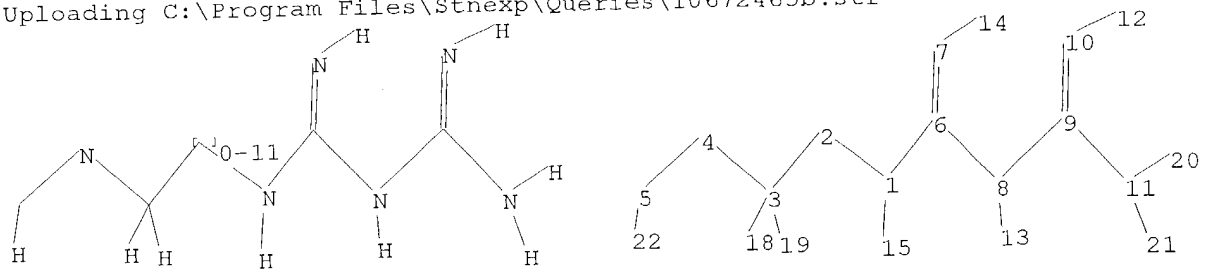


CM 2



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>
Uploading C:\Program Files\Stnexp\Queries\10672465b.str

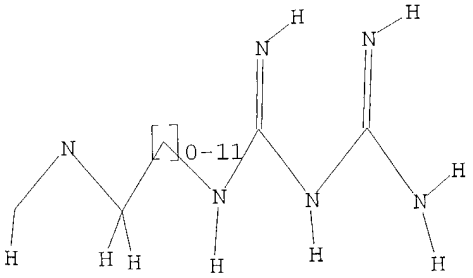


chain nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 18 19 20 21 22
chain bonds :
1-2 1-6 1-15 2-3 3-4 3-18 3-19 4-5 5-22 6-7 6-8 7-14 8-9 8-13 9-10
9-11 10-12 11-20 11-21
exact/norm bonds :
1-2 1-6 3-4 4-5 6-7 6-8 8-9 9-10 9-11
exact bonds :
1-15 2-3 3-18 3-19 5-22 7-14 8-13 10-12 11-20 11-21

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 18:CLASS 19:CLASS
20:CLASS 21:CLASS 22:CLASS

L7 STRUCTURE UPLOADED

=> d query
L7 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l7
SAMPLE SEARCH INITIATED 17:58:10 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 119 TO ITERATE

100.0% PROCESSED 119 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1726 TO 3034
PROJECTED ANSWERS: 1 TO 80

L8 1 SEA SSS SAM L7

=> s l7 full
FULL SEARCH INITIATED 17:58:18 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2471 TO ITERATE

100.0% PROCESSED 2471 ITERATIONS 54 ANSWERS
SEARCH TIME: 00.00.01

L9 54 SEA SSS FUL L7

=> fil caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	156.68	313.62

FILE 'CAPLUS' ENTERED AT 17:58:24 ON 10 MAR 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 10 Mar 2004 VOL 140 ISS 11
FILE LAST UPDATED: 9 Mar 2004 (20040309/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l9
L10 12 L9

=> d l10 1-12 abs ibib hitstr

L10 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AB Aminobiguanides and the use of same as antimicrobial agents in pharmaceutical compns. are disclosed. The aminobiguanides are useful in the preservation of pharmaceutical compns., particularly ophthalmic pharmaceutical compns. and compns. for treating contact lenses. An compds. are especially useful for disinfecting contact lenses. An aminobiguanide derivative was prepared by the reaction of N-dodecylmethyl-1,3-propanediamine dihydrochloride with dimethylpentylcynoguanidine. Formulation of a solution containing 0.0005% of the aminobiguanide derivative was disclosed. The solution had potent antimicrobial activity against Candida, Serratia, and Staphylococcus.

ACCESSION NUMBER: 1999:421573 CAPLUS
DOCUMENT NUMBER: 131:63446
TITLE: Aminobiguanides and the use thereof to disinfect contact lenses and preserve pharmaceutical compositions
INVENTOR(S): Park, Joonsup; Dassanayake, Nissanke L.; Mcqueen, Nathaniel D.; Schlitzer, Ronald L.
PATENT ASSIGNEE(S): Alcon Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9932158	A2	19990701	WO 1998-US27332	19981218
WO 9932158	A3	19990902		
W: AU, BR, CA, JP, KR, MX, NO, NZ, SG, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
ZA 9811445	A	19990816	ZA 1998-11445	19981214
CA 2309172	AA	19990701	CA 1998-2309172	19981218
AU 9919415	A1	19990712	AU 1999-19415	19981218
AU 751002	B2	20020808		
EP 1042007	A2	20001011	EP 1998-964242	19981218
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9814299	A	20011030	BR 1998-14299	19981218
JP 2001526090	T2	20011218	JP 2000-526148	19981218
NZ 505742	A	20021126	NZ 1998-505742	19981218
TW 516960	B	20030111	TW 1998-87121182	19981218
NO 2000003119	A	20000616	NO 2000-3119	20000616
US 6664294	B1	20031216	US 2000-581952	20000803
			US 1997-68330P P	19971219
			WO 1998-US27332 W	19981218

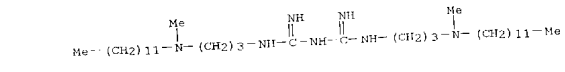
PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 131:63446

IT **228259-92-5P 228259-94-7P 228259-95-8P**
228259-96-9P 228259-97-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(aminobiguanides and use thereof to disinfect contact lenses and preserve pharmaceutical compns.)

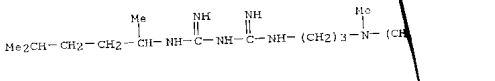
RN 228259-92-5 CAPLUS
CN Imidodicarbonimidic diamide, N-(1,4-dimethylpentyl)-N'-[3-

L10 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



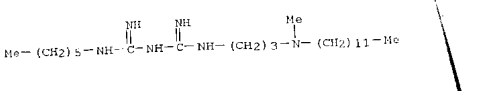
●4 HCl

L10 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS
(dodecylmethylamino)propyl]-, trihydrochlo



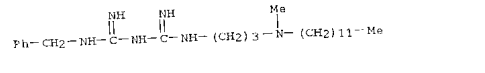
●3 HCl

RN 228259-94-7 CAPLUS
CN Imidodicarbonimidic diamide, N-[3-(dodecylmeth
trihydrochloride (9CI) (CA INDEX NAME)



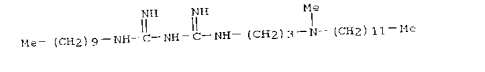
●3 HCl

RN 228259-95-8 CAPLUS
CN Imidodicarbonimidic diamide, N-[3-(dodecylmethylami
(phenylmethyl)-, trihydrochloride (9CI) (CA INDEX N



●3 HCl

RN 228259-96-9 CAPLUS
CN Imidodicarbonimidic diamide, N-decyl-N'-[3-(dodecylmethyl
trihydrochloride (9CI) (CA INDEX NAME)



●3 HCl

RN 228259-97-0 CAPLUS
CN Imidodicarbonimidic diamide, N,N'-bis[3-(dodecylmethylamino)p
tetrahydrochloride (9CI) (CA INDEX NAME)

L10 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AB Claimed are X1X2X3SiR1NHC(:NH)NHR2 [I; X1-3 = monovalent group; ≥1 of X1-3 = hydrolyzing group; R1 = C1-30 alkylene; R2 = cyano, C(:N = H, C1-20 alkyl, (substituted) Ph] or their acid addition salts, preparation of I by reaction of X1X2X3SiR1NH2 (X1-3, R1 = same as I) with NCN:C(SMe) (II) and optional reaction with NH3 or primary amines, microbicides containing I, construction materials treated with I, and I hydrolyzates. An Et solution of 10 g KBE 903 and 5.2 g II was refluxed for 18 h to give I [R1 = (CH2)3, R2 = cyano; X1-3 = OEt], which was applied to a slate p to show ≤20% growth of Aspergillus niger.

ACCESSION NUMBER: 1995:220791 CAPLUS
DOCUMENT NUMBER: 123:33372
TITLE: Preparation of antimicrobial (guanidinoalkyl)silan and their uses
INVENTOR(S): Honda, Tsunetoshi; Azuma, Akiko; Nishihara, Akira
PATENT ASSIGNEE(S): Mitsubishi Materials Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

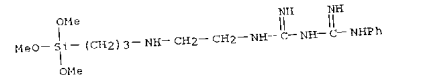
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06239877	A2	19940830	JP 1993-70368	19930329
JP 3119017	B2	20001218		
			JP 1992-357835 A	19921225
PRIORITY APPLN. INFO.:			JP 1992-357836 A	19921225

MARPAT 123:33372

OTHER SOURCE(S):

IT **149889-98-5P 149889-99-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); MOA (Modifier or additive use); SPN (Synthetic preparation); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of antimicrobial (guanidinoalkyl)silanes for construction materials)

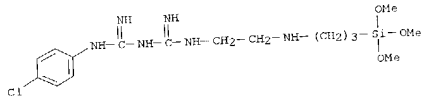
RN 149889-98-5 CAPLUS
CN 2-Oxa-7,10,12-triaza-3-silatridecan-13-imidamide, 11-imino-3,3-dimethoxy-N-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 149889-99-6 CAPLUS
CN 2-Oxa-7,10,12-triaza-3-silatridecan-13-imidamide, N-(4-chlorophenyl)-11-imino-3,3-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)

L10 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



● HCl

L10 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

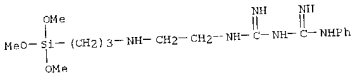
AB X3Si(CH2)n [NH(CH2)2]m G [X = halo, alkoxy; n = 1-6; m = 0, 1; G = (alkyl-substituted) cyanoguanidyl, biguanidyl, (halo-, alkyl-, or fluoromethyl-substituted) Ph], were prepared Thus, H2N(CH2)3Si(OEt)3 and NCN:C(SMe)NH2 were refluxed 18 h in EtOH to give NCNCC(:NH)NH(CH2)3SiMe3, which was used to impregnate cotton. The resulting material showed 86.5% antibacterial activity against Klebsiella pneumoniae according to AATCC-100 and 0% water uptake according to JIS-L-1018A.

ACCESSION NUMBER: 1993:581013 CAPLUS
DOCUMENT NUMBER: 119:181013
TITLE: Preparation of cyanoguanidyl- and biguanidylalkylsilane coupling agents with antibacterial properties
INVENTOR(S): Honda, Tsunetoshi; Azuma, Akiko; Nishihara, Akira
PATENT ASSIGNEE(S): Mitsubishi Materials Corp., Japan
SOURCE: Ger. Offen., 7 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4243398	A1	19930701	DE 1992-4243398	19921221
DE 4243398	C2	19941103		
JP 05247066	A2	19930924	JP 1991-359589	19911228
JP 05320176	A2	19931203	JP 1991-359591	19911228
JP 2874422	B2	19990324		
GB 2262740	A1	19930630	GB 1992-26784	19921223
GB 2262740	B2	19951025		
US 5312944	A	19940517	US 1992-996987	19921224
PRIORITY APPLN. INFO.:			JP 1991-359589	19911228
			JP 1991-359591	19911228

OTHER SOURCE(S): MARPAT 119:181013
IT **149889-98-5P 149889-99-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as antibacterial coupling agent)

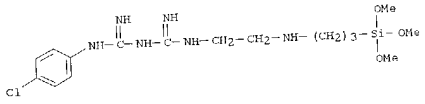
RN 149889-98-5 CAPLUS
CN 2-Oxa-7,10,12-triaza-3-silatridecan-13-imidamide, 11-imino-3,3-dimethoxy-N-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 149889-99-6 CAPLUS
CN 2-Oxa-7,10,12-triaza-3-silatridecan-13-imidamide, N-(4-chlorophenyl)-11-imino-3,3-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)

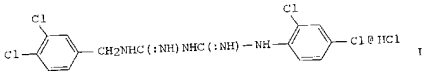
L10 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



● HCl

L10 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

GI



I

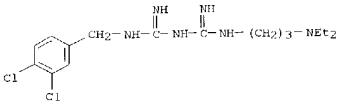
AB Title compds. R1NHC(:NH)NHC(:NH)NHR2 [R1 = (substituted) PhCH2, (substituted) Ph; R2 = (substituted) alkyl, substituted Ph, cyclohexylmethyl, etc.], useful as bactericides, are prepared by reacting the appropriate amine with a cyanoguanidine. Equimol. amts. of N1-cyano-N3-(3,4-dichlorobenzyl)guanidine and 3,4-Cl2C6H3NH2·HCl were refluxed for 2 h to give the biguanide I. In test against Staphylococcus aureus MRSA 57 the min. inhibitory concentration of I was 0.39 μg/mL. Generic injectable formulations containing the title compds. are given.

ACCESSION NUMBER: 1993:516980 CAPLUS
DOCUMENT NUMBER: 119:116980
TITLE: Preparation of biguanide derivatives as disinfectants
INVENTOR(S): Ishikawa, Hiroshi; Yasumura, Koichi; Tsubouchi, Hidetsugu; Higuchi, Yukio; Tamaoka, Hisashi
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 45 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 507317	A2	19921007	EP 1992-105776	19920403
EP 507317	A3	19930224		
EP 507317	B1	19970115		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE				
JP 04308562	A2	19921030	JP 1991-73202	19910405
IN 181293	A	19980509	IN 1992-DE289	19920331
CA 2064664	AA	19921006	CA 1992-2064664	19920401
CA 2064664	C	20000111		
AU 9214016	A1	19921008	AU 1992-14016	19920402
AU 651184	B2	19940714		
US 5376686	A	19941227	US 1992-863420	19920403
AT 147725	E	19970215	AT 1992-105776	19920403
ES 2099176	T3	19970516	ES 1992-105776	19920403
CN 1065453	A	19921021	CN 1992-102352	19920404
CN 1038248	B	19980506		
JP 05194361	A2	19930803	JP 1992-155336	19920615
PRIORITY APPLN. INFO.:			JP 1991-73202 A	19910405
			JP 1991-147644 A	19910619
			JP 1991-224306 A	19910904

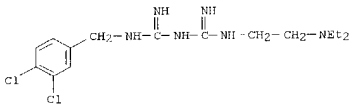
OTHER SOURCE(S): MARPAT 119:116980
IT **146510-14-7P 146510-17-0P 146510-19-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

L10 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
(prepn. of, as bactericide)
RN 146510-14-7 CAPLUS
CN Imidodicarbonimidic diamide, N-[(3,4-dichlorophenyl)methyl]-N'-[3-(diethylamino)propyl]-, monohydrochloride (9CI) (CA INDEX NAME)

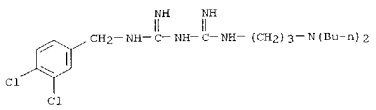


● HCl

RN 146510-17-0 CAPLUS
CN Imidodicarbonimidic diamide, N-[(3,4-dichlorophenyl)methyl]-N'-[2-(diethylamino)ethyl]- (9CI) (CA INDEX NAME)



RN 146510-19-2 CAPLUS
CN Imidodicarbonimidic diamide, N-[3-(dibutylamino)propyl]-N'-[(3,4-dichlorophenyl)methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

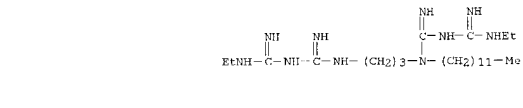


●2 HCl

L10 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
AB Antibacterial bis(biguanides) AR1NC(:NR2)NHC(:NR3)NR4XNR5C(:NR3)NHC(:NR6)NR7R8 I [R, R1, R3-5, R7, R8 = H, (un)substituted alkyl, Ph, naphthyl; NRR1, NR7R8 = (un)substituted N-containing heterocycles; R3, R6 = H, alkyl; X = (un)substituted C2-16 alkylene, alkylene(cycloalkylene)alkylene] were prepared Thus, H2N(CH2)12NH2 reacted with 2-ClC6H4CHO in EtOH-HOAc under H, using PtO2 catalyst, to give R5NH(CH2)12NHR9 (R9 = CH2C6H4Cl-2), which reacted with H2NC(:NH)NHCN to give H2NC(:NH)NH(C:NH)NR9(CH2)12NHR9C(:NH)NHC(:NH)NH2. I were active against Candida albicans and 8 gram pos. bacteria at 1-12 μg/mL, and bactericidal against 14 gram neg. bacteria at 20-250 μg/mL.
ACCESSION NUMBER: 1985:220469 CAPLUS
DOCUMENT NUMBER: 102:220469
TITLE: Bis(1-substituted biguanide) derivatives
INVENTOR(S): Edwards, Philip Neil; Large, Michael Stewart
PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK
SOURCE: Eur. Pat. Appl., 38 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

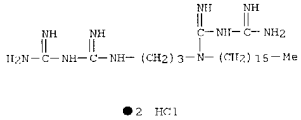
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 126567	A1	19841128	EP 1984-302927	19840501
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 4567174	A	19860128	US 1984-607703	19840507
JP 59206347	A2	19841122	JP 1984-91184	19840509
PRIORITY APPLN. INFO.:			GB 1983-12664	19830509

IT **95669-79-7P 95669-84-4P 95669-85-5P**
95669-86-6P 95669-94-6P 95669-95-7P
95669-96-8P 95669-97-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of, as bactericide)
RN 95669-79-7 CAPLUS
CN 2,4,8,10-Tetraazaundecanediimidamide, 4-dodecyl-N,N''-diethyl-3,9-diimino-, dihydrochloride (9CI) (CA INDEX NAME)



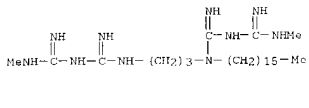
●2 HCl

RN 95669-84-4 CAPLUS
CN 2,4,8,10-Tetraazaundecanediimidamide, 4-hexadecyl-3,9-diimino-, dihydrochloride (9CI) (CA INDEX NAME)



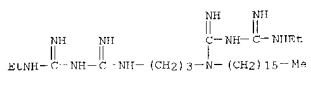
●2 HCl

L10 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
RN 95669-85-5 CAPLUS
CN 2,4,8,10-Tetraazaundecanediimidamide, 4-hexadecyl-3,9-diimino-N,N''-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



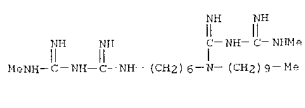
●2 HCl

RN 95669-86-6 CAPLUS
CN 2,4,8,10-Tetraazaundecanediimidamide, N,N''-diethyl-4-hexadecyl-3,9-diimino-, dihydrochloride (9CI) (CA INDEX NAME)



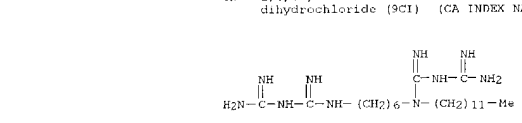
●2 HCl

RN 95669-94-6 CAPLUS
CN 2,4,11,13-Tetraazatetradecanediimidamide, 4-decyl-3,12-diimino-N,N''-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



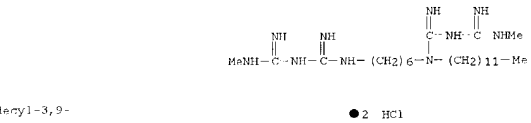
●2 HCl

L10 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
RN 95669-95-7 CAPLUS
CN 2,4,11,13-Tetraazatetradecanediimidamide, 4-dodecyl-3,12-diimino-, dihydrochloride (9CI) (CA INDEX NAME)



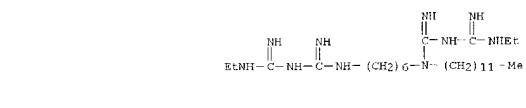
●2 HCl

RN 95669-96-8 CAPLUS
CN 2,4,11,13-Tetraazatetradecanediimidamide, 4-dodecyl-3,12-diimino-N,N''-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 95669-97-9 CAPLUS
CN 2,4,11,13-Tetraazatetradecanediimidamide, 4-dodecyl-N,N''-diethyl-3,12-diimino-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

L10 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AB Polymeric biguanides and their salts were used to protect crops in the field and in storage from molds and bacteria. Thus, poly(hexamethylenediguanide-HCl) (I) [27083-27-8], applied to oranges at 1000 or 2000 ppm by dipping, protected them from rotting due to Penicillium digitatum and Alternaria citri approx. as well as did benomyl [17804-35-2]. Only 0.21% of wheat plants exptl. inoculated with Puccinia recondita developed rust when they were previously sprayed with 2 ppm I combined with 1000 ppm of a surfactant (4ml/20 plants), compared to 15.10% of untreated controls. I had low toxicity and was not irritating or allergenic in lab animals.

ACCESSION NUMBER: 1975:509787 CAPLUS
DOCUMENT NUMBER: 83:109787
TITLE: Combatting molds and bacteria
PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd., UK
SOURCE: Neth. Appl., 60 pp.
CODEN: NAXXAN
DOCUMENT TYPE: Patent
LANGUAGE: Dutch
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

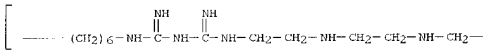
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 7410546	A	19750210	NL 1974-10546	19740806
GB 1434040	A	19760428	GB 1973-37203	19740724
ZA 7404822	A	19750827	ZA 1974-4822	19740729
FR 2239942	A1	19750307	FR 1974-27126	19740805
AU 7472008	A1	19760205	AU 1974-72008	19740805
BE 818551	A1	19750206	BE 1974-147345	19740806
DK 7404185	A	19750421	DK 1974-4185	19740806
JP 50048134	A2	19750430	JP 1974-89558	19740806
BR 7406445	A0	19750527	BR 1974-6445	19740806
DE 2437844	A1	19750626	DE 1974-2437844	19740806

PRIORITY APPLN. INFO.: GB 1973-37203 19730806
GB 1974-18324 19740426
GB 1973-7203 19730806

IT **56307-32-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(bactericidal and fungicidal activity of)

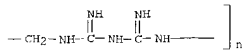
RN 56307-32-5 CAPLUS
CN Poly(iminocarbonimidoyliminocarbonimidoylimino-1,2-ethanediylimino-1,2-ethanediylimino-1,2-ethanediyliminocarbonimidoyliminocarbonimidoylimino-1,6-hexanediyl) (9CI) (CA INDEX NAME)

PAGE 1-A



L10 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B



L10 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AB Twenty-four title compds. [I, R = NMe2, NH(CH2)3NBu2, 4-hydroxypiperidino, morpholino, 4-allyl-1-piperazinyl, (β-piperidinoethyl)amino, [3-(hexahydro-1-azepinyl)propyl]amino, or NH(CH2)3N+MeBu2 I-; R1 = H, 4-Me, 4-F, 3- or 4-Cl] and optionally their fumarates or hydrochlorides, used as antispasmodics, coronary blood vessel dilators, analgesics, antiphlogistics, and antimalarials, were prepared Thus, 3-(m-chlorophenyl)-1,2,4-oxadiazole reacted with H2NC(:NH)NHC(:NH)NH(CH2)3NBu2 in CH2Cl2 and aqueous NaOH 1 hr at 35° to give I [R = NH(CH2)3NBu2, R1 = 3-Cl] (II). Treatment of II with MeI in Me2CO gave I [R = NH(CH2)3N+MeBu2 I-, R1 = 3-Cl]. The LD50 was 1500 or >4000 mg II/kg in mice on oral or s.c. administration, resp.

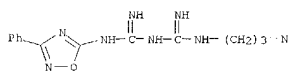
ACCESSION NUMBER: 1973:136303 CAPLUS
DOCUMENT NUMBER: 78:136303
TITLE: Pharmaceutical 1-[3-phenyl-1,2,4-oxadiazol-5-yl]biguanides
INVENTOR(S): Aron-Samuel, Jan M. D.
SOURCE: Ger. Offen., 22 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2240887	A1	19730301	DE 1972-2240887	19720819
GB 1351025	A	19740424	GB 1971-39234	19710820
FR 2230347	A1	19741220	FR 1972-28279	19720804
BE 787327	A1	19721201	BE 1972-120766	19720808
US 3808224	A	19740430	US 1972-282194	19720811
ZA 7205619	A	19730530	ZA 1972-5619	19720815
CA 990291	A1	19760601	CA 1972-149783	19720815
AU 7245720	A1	19740221	AU 1972-45720	19720817
NL 7211374	A	19730222	NL 1972-11374	19720818
AT 317919	B	19740925	AT 1972-7172	19720818
ES 405932	A1	19760116	ES 1972-405932	19720818
JP 48029773	A2	19730419	JP 1972-83247	19720819

PRIORITY APPLN. INFO.: GB 1971-39234 19710820

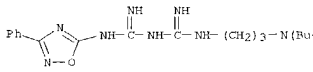
IT **41740-73-2P 41740-74-3P 41740-75-4P**
41740-76-5P 41740-77-6P 41740-86-7P
41740-87-8P 41740-89-0P 41740-90-3P
41740-91-4P 41740-94-7P 41740-95-8P
41740-97-0P 41741-03-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 41740-73-2 CAPLUS
CN Imidodicarbonimidic diamide, N-[3-(dibutylamino)propyl]-N'-(3-phenyl-1,2,4-oxadiazol-5-yl)- (9CI) (CA INDEX NAME)



RN 41740-74-3 CAPLUS
CN Imidodicarbonimidic diamide, N-[3-(dibutylamino)propyl]-N'-(3-phenyl-1,2,4-oxadiazol-5-yl)-, hydrochloride (9CI) (CA INDEX NAME)

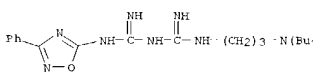
L10 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 41740-75-4 CAPLUS
CN Imidodicarbonimidic diamide, N-[3-(dibutylamino)propyl]-N'-(3-phenyl-1,2,4-oxadiazol-5-yl)-, (2E)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

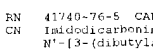
CRN 41740-73-2
CMF C21 H34 N8 O



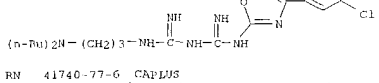
CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.

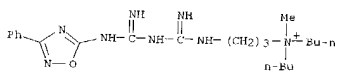


RN 41740-76-5 CAPLUS
CN Imidodicarbonimidic diamide, N-[3-(3-chlorophenyl)-1,2,4-oxadiazol-5-yl]-N'-[3-(dibutylamino)propyl]- (9CI) (CA INDEX NAME)



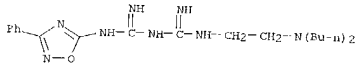
RN 41740-77-6 CAPLUS
CN 1-Butanaminium, N-butyl-N-[3-[[imino[[imino[(3-phenyl-1,2,4-oxadiazol-5-yl)amino]methyl]amino]methyl]amino]propyl]-N-methyl-, iodide (9CI) (CA INDEX NAME)

L10 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

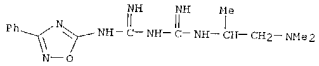


● I-

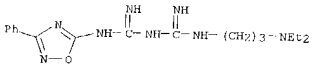
RN 41740-86-7 CAPLUS
CN Imidodicarbonimidic diamide, N-[2-(dibutylamino)ethyl]-N'-(3-phenyl-1,2,4-oxadiazol-5-yl)- (9CI) (CA INDEX NAME)



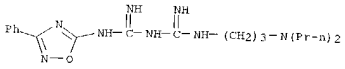
RN 41740-87-8 CAPLUS
CN Imidodicarbonimidic diamide, N-[2-(dimethylamino)-1-methylethyl]-N'-(3-phenyl-1,2,4-oxadiazol-5-yl)- (9CI) (CA INDEX NAME)



RN 41740-89-0 CAPLUS
CN Imidodicarbonimidic diamide, N-[3-(diethylamino)propyl]-N'-(3-phenyl-1,2,4-oxadiazol-5-yl)- (9CI) (CA INDEX NAME)

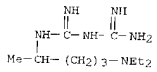


RN 41740-90-3 CAPLUS
CN Imidodicarbonimidic diamide, N-[3-(dipropylamino)propyl]-N-(3-phenyl-1,2,4-oxadiazol-5-yl)- (9CI) (CA INDEX NAME)



L10 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

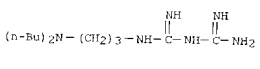
CRN 48070-83-3
CMF C11 H26 N6



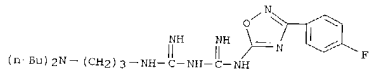
CM 2

CRN 463-79-6
CMF C H2 O3

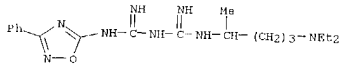
IT **41740-98-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with (chlorophenyl)oxadiazoles)
RN 41740-98-1 CAPLUS
CN Imidodicarbonimidic diamide, N-[3-(dibutylamino)propyl]- (9CI) (CA INDEX NAME)



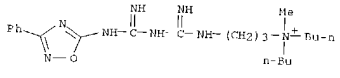
L10 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
RN 41740-91-4 CAPLUS
CN Imidodicarbonimidic diamide, N-[3-(dibutylamino)propyl]-N'-[3-(4-fluorophenyl)-1,2,4-oxadiazol-5-yl]- (9CI) (CA INDEX NAME)



RN 41740-94-7 CAPLUS
CN Imidodicarbonimidic diamide, N-[4-(diethylamino)-1-methylbutyl]-N'-(3-phenyl-1,2,4-oxadiazol-5-yl)- (9CI) (CA INDEX NAME)

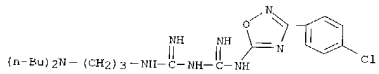


RN 41740-95-8 CAPLUS
CN 1-Butanaminium, N-butyl-N-[3-[[imino[[imino[(3-phenyl-1,2,4-oxadiazol-5-yl)amino]methyl]amino]methyl]amino]propyl]-N-methyl-, bromide (9CI) (CA INDEX NAME)



● Br-

RN 41740-97-0 CAPLUS
CN Imidodicarbonimidic diamide, N-[3-(4-chlorophenyl)-1,2,4-oxadiazol-5-yl]-N'-[3-(dibutylamino)propyl]- (9CI) (CA INDEX NAME)



RN 41741-03-1 CAPLUS
CN Carbonic acid, compd. with N-[4-(diethylamino)-1-methylbutyl]imidodicarbonimidic diamide (1:1) (9CI) (CA INDEX NAME)

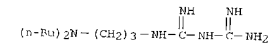
CM 1

L10 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
GI For diagram(s), see printed CA Issue.
AB The title compds. (I) showing CNS depressant, anticonvulsant, narcosis-potentiating, and reserpine-antagonizing properties are useful in treatment of neuroses, hallucinations, and endogenous depressions and also for some types of cardiac and respiratory depression. Some derivs. are also weed-killers. I are prepared by cyclization of diguanides R1R2NC(:NH)NHC(:NH)NH2 (II) with α-hydroxy carboxylic acids. II possess antidiabetic, antiinflammatory, and anticholinergic properties. To 21 g cyanoguanidine (III) and 400 ml BuOH was added 1-propylpiperazine.2HBr to give 72 g 1-(4-propyl)piperazinyldiguanide II [(NR1R2 =) 4-propyl-1-piperazinyl].2HBr, m. 232-4°. Refluxing 84 g III, 18 g Et2N(CH2)2NH2.2HCl, and 250 ml Cellosolve 3 hr gave 114 g II [R1 = Et2N(CH2)2, R2 = H].2HCl, m. 171-3°. The following II were similarly prepared (R1R2N, salt, and m.p. given): Me2N(CH2)3NH, 2HCl, 225° (decomposition), also H2CO3.H2O salt, m. 90° (decomposition); Me2NCH2CHMeNH, 2HCl, 236-7°; Bu2N(CH2)3NH, H2CO3.H2O, 132-4° (decomposition); Bu2N(CH2)2NH, H2CO3, 114-16°; Pr2N(CH2)3NH, H2CO3.H2O, 106-8°; per-hydroazepinopropylamino, H2CO3.H2O, 103-5° (decomposition); Me2N(CH2)2NMe, 2HCl, 254°; Me2N(CH2)2NEt, 2HCl, 179-81°; Et2N(CH2)2NMe, 2HCl, 194-5°; Me2N(CH2)3NPr, 2HCl, 218-20°; Et2N(CH2)2NPr-iso, base, 98-100°; 4-hydroxyethyl-1-piperazinyl, 2HBr, 168-70°; piperidinoethyl, 2HCl, 186-8°; morpholinopropyl, base, 109-10°; 4-allyl-1-piperazinyl, 2HBr, 235-70°; 4-phenylpiperazinyl, 2HCl, 230-2° (decomposition); 4-(4-chlorophenyl)-1-piperazinyl, 3HCl, 261-3° (decomposition); 4-isopropyl-1-piperazinyl, 2HBr, 218-20°; 4-methylperhydro-1,4-diazepin-1-yl, 2HBr, 215-17°. To a stirred mixture of 51.5 g II (R1R2N = 4-methyl-1-piperazinyl).2HCl, 150 ml MeOH, and 300 ml 2N NaOMe in MeOH was added 37.6 g Et α-hydroxycaprylate in 20 ml MeOH to give 15.9 g I (R = C6H13, R1R2N = 4-methyl-1-piperazinyl).2HCl, m. 270° (decomposition); base m. 80-2°. The following I were similarly prepared (R, R1, R2, and m.p. given): H, H, Et2N(CH2)2, 146-8°; Me, H, Et2N(CH2)2, 99-100°; Et, H, allyl, 86-7°; Et, H, Et2N(CH2)2, 83-5°; Et, H, Me2N(CH2)3, 88-90°; Bu, H, allyl, 167-8° (HCl); Bu, H, Et2N(CH2)2, 130-1°; C6H13, H, allyl, 104-6°; C6H13, H, Et2N(CH2)2, 75°; C6H13, H, Me2N(CH2)3, 98-9°; Ph, H, allyl, 140-2°; Ph, H, Et2N(CH2)2, 134-5°; Ph, H, Me2N(CH2)3, 122°; 4-FC6H4, H, Et2N(CH2)2, 143-4°; 4-FC6H4, H, Me2N(CH2)3, 130-1°; 4-ClC6H4, H, Et2N(CH2)3, 140°; 4-ClC6H4, H, Me2N(CH2)3, 135-6°; 4-BrC6H4, H, Et2N(CH2)2, 138°; 2-ClC6H4, H, Et2N(CH2)2, 130°; 2-ClC6H4, H, Me2N(CH2)3, 138-90°; 4-FC6H4, H, Et2N(CH2)2, 136-8°; Ph, H, Me2NCH2CHMe, 141-2°; Ph, H, Bu2N(CH2)3, 98-9°; Ph, H, Pr2N(CH2)3, 108-10°; 4-MeC6H4, H, cyclohexyl, 161-3°; 4-MeC6H4, H, Et2N(CH2)2, 128°; 4-MeC6-H4, H, Me2N(CH2)3, 136°; 4-MeC6H4, H, Me2NCH2CHMe, 170-2°; 4-iso-PrC6H4, H, Et2N(CH2)2, 104-6°; 4-MeOC6H4, H, allyl, 160°; 4-MeOC6H4, H, Et2N(CH2)2, 106°; 4-MeOC6H4, H, Me2N(CH2)3, 132-4°; 4-MeOC6H4, H, Me2NCH2CHMe, 177-9°; 3-MeOC6H4, H, allyl, 94-6°; 3-MeOC6H4, H, Et2N(CH2)2, 96-7°; 3-MeOC6H4, H, Me2N(CH2)3, 142°; 3-MeOC6H4, H, Me2NCH2CHMe, 139-40°; 3-F3CC6H4, H, Et2N(CH2)2, 128-9°; Et, Me, Me2N(CH2)2, 124-6°; Et, Et, Me2N(CH2)2, 73-5°; Et, Me, Me2N(CH2)3, 99-100°; 3,4-Cl2C6H3, H, Et2N(CH2)2, 146-7°; 3-ClC6H4, H, Et2N(CH2)2, 129-30°; 3-ClC6H4, H, Me2N(CH2)3, 129-31°; 3,4,5-(MeO)3C6H2, H, Et2N(CH2)2, 139°; 3,4,5-(MeO)3C6H2, H, Me2N(CH2)3, 166-8°; 3,4,5-(MeO)3C6H2, H, Me2NCH2CHMe, 183°; 3,4-methylenedioxyphenyl (MDP), H, allyl, 136°; MDP, H, Et2N(CH2)2, 104-5°; MDP, H, Me2NCH2CHMe, 172-3°; Et, H, piperidinoethyl, 102-4°; Et, Me,

Et2N(CH2)2, 67-9°; Bu, H, piperidinoethyl, 101-3°; Ph, H, Et2N(CH2)3, 104-6°; Ph, H, piperidinoethyl, 168-9°; Ph, Me, Et2N(CH2)2, 91-3°; 4-ClC6H4, H, piperidinoethyl, 171-3°; 4-MeC6H4, H, Et2N(CH2)3, 120-2°; 4-MeC6H4, H, morpholinopropyl, 166-7°; 4-MeC6H4, H, piperidinoethyl, 166-7°; 3-MeOC6H4, H, Et2N(CH2)3, 103-4°; 3-MeOC6H4, H, piperidinoethyl, 133°; 3,4,5-(MeO)3C6H2, H, piperidinoethyl, 138-40°; MDP, H, Et2N(CH2)3, 104-5°; MDP, H, morpholinopropyl, 115-17°; MDP, H, piperidinoethyl, 150-1°. The following triazines I (R, NR1R2, and m.p. given) were similarly prepd.: Et, 4-allyl-1-piperazinyl (AP), 103-4°; Et, 4-methylperhydro-1,4-diazepin-1-yl, 123-5°; Ph, 4-phenyl-1-piperazinyl, 153-5°; Ph, 4-(4-chlorophenyl)-1-piperazinyl, 190-3°; Ph, AP, 155-6°; 4-FC6H4, AP, 116-18°; 4-ClC6H4, AP, 116°; H, 4-methyl-1-piperpazinyl (MP), 156-7°; 4 propyl-1-piperazinyl (PP), 165-6°; Me, MP (III), 150°; Me, PP, 117-19° Et, 4-isopropyl-1-piperazinyl, 109-10°; Et, MP, 132°; Et, PP, 116-17°; Et, 4-(2-hydroxyethyl)-1-piperazinyl (HEP), 116-17°; Pr, MP, 118-20°; Bu, MP, 280° (decompn.)(2HCl); iso-Bu, MP, 152-4°; C6H13, MP, 80-2° (270° (decompn.)2HCl); C6H13, PP, 72-3°; C6H13, HEP, 86-7°; C9H19, MP, 270° (decompn.) :2HCl); C14H29, MP, 153-62°; Ph, 4-isopropyl-1-piperazinyl, 149-51°; Ph, MP (IV), 163°; Ph, PP, 158°; Ph, HEP, 192°; 4-FC6H4, MP, 128°; 4-FC6H4, PP, 120°; 4-ClC6H4, MP, 141-3°; 4-ClC6H4, PP, 148°; 4-BrC6H4, MP, 136-8°; 3-FC6H4, MP, 192-3°; 4-MeC6H4, MP, 147-8°; 4-MeC6H4, PP, 133-4°; 4-MeC6H4, HEP, 153-5°; 3-ClC6H4, MP, 210-12°; 4-iso-PrC6H4, MP, 148°; 4-MeOC6H4, 4-allyl-1-piperazinyl, 121-2°; 4-MeOC6H4, MP, 162°; 4-MeOC6H4, HEP, 127-9°; 3-MeOC6H4, MP, 145°; 3-MeOC6H4, PP, 118-19°; 3-F3CC6H4, 4-allyl-1-piperazinyl, 103-5°; 3-F3CC6H4, MP, 170-2°; 3-F3CC6H4, PP, 128-9°; 2,4-Cl2C6H3, MP, 142-3°; 3,4-Cl2C6H3, MP, 163-5°; 3,4-(MeO)2C6H3, MP, 105°; 3,4,5-(MeO)3C6H2, MP, 172°; MDP, 4-allyl-1-piperazinyl} 123-5°; MDP, MP, 166-8°; MPP, PP, 148-50°; MDP, HEP, 156°; cyclohexyl, MP, 169°; 3-FC6H4, 4-allyl-1-piperazinyl, 165-7°. Using optically active esters, optically active triazines were prepd.: III, m. 150°, [α]20D -12.5°; IV, m. 163°, [α]20D -18.7°. Pharmacol. data are given.

ACCESSION NUMBER: 1970:100767 CAPLUS
DOCUMENT NUMBER: 72:100767
TITLE: Anticonvulsant triazine derivatives
INVENTOR(S): Aron-Samuel, Jan M. D.; Sterne, Jean J.
SOURCE: S. African, 49 pp.
CODEN: SFXXAB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ZA 6900641		19690731		
CA 941309			CA	
DE 1905683			DE	
FR 1583688			FR	
FR 338			FR	
FR 7407			FR	
GB 1257214			GB	



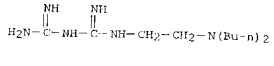
CM 2

CRN 463-79-6
CMF C H2 O3

RN 23196-49-8 CAPLUS
CN Carbonic acid, compd. with 1-[2-(dibutylamino)ethyl]biguanide (1:1) (8CI) (CA INDEX NAME)

CM 1

CRN 45215-37-0
CMF C12 H28 N6



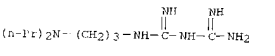
CM 2

CRN 463-79-6
CMF C H2 O3

RN 23196-50-1 CAPLUS
CN Carbonic acid, compd. with 1-[3-(dipropylamino)propyl]biguanide (1:1) (8CI) (CA INDEX NAME)

CM 1

CRN 45204-86-2
CMF C11 H26 N6



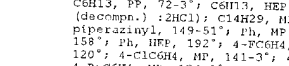
US 3703514 19720000 US
PRIORITY APPLN. INFO.: FR 19680208
FR 19681231

IT **23196-46-5P 23196-47-6P 23196-48-7P 23196-49-8P 23196-50-1P 23199-15-7P 23199-16-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 23196-46-5 CAPLUS
CN Carbonic acid, compd. with 1-[3-(diethylamino)propyl]biguanide (1:1) (8CI) (CA INDEX NAME)

CM 1

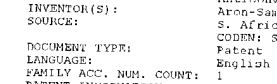
CRN 45160-29-0
CMF C9 H22 N6



CM 2

CRN 463-79-6
CMF C H2 O3

RN 23196-47-6 CAPLUS
CN Biguanide, 1-[2-(dimethylamino)-1-methylethyl]-, dihydrochloride (8CI) (CA INDEX NAME)



●2 HCl

RN 23196-48-7 CAPLUS
CN Carbonic acid, compd. with N-[3-(dibutylamino)propyl]imidodicarbonimidic diamide (1:1) (9CI) (CA INDEX NAME)

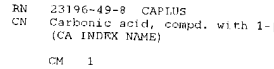
CM 1

CRN 41740-98-1
CMF C13 H30 N6

CM 2

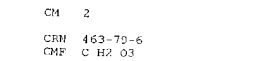
CRN 463-79-6
CMF C H2 O3

RN 23199-15-7 CAPLUS
CN Biguanide, 1-[2-(diethylamino)ethyl]-, dihydrochloride (8CI) (CA INDEX NAME)



●2 HCl

RN 23199-16-8 CAPLUS
CN Biguanide, 1-[3-(dimethylamino)propyl]-, trihydrochloride (8CI) (CA INDEX NAME)



●3 HCl

L10 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

GI For diagram(s), see printed CA Issue.

AB α-Hydroxy esters RCH(OH)CO2Et, where R is an alkyl or substituted phenyl group or Ph, are treated with biguanides H2NC(:NH)NHC(:NH)NR1R2 to give triazines (I), where R1 is H and R2 is ω-dialkylaminoalkyl, ω-piperidinoalkyl, or ω-morpholinoalkyl; or (NR1R2 =) piperazino.

ACCESSION NUMBER: 1969:438919 CAPLUS

DOCUMENT NUMBER: 71:38919

TITLE: New triazines

AUTHOR(S): Noel, Michel; Prugnard, Etienne; Patereau, Gerard

CORPORATE SOURCE: Soc. Exploit. Steroides, Puteaux, Fr.

SOURCE: Comptes Rendus des Seances de l'Academie des Sciences, Serie C: Sciences Chimiques (1969), 268(15), 1407-9
CODEN: CHDCAQ; ISSN: 0567-6541

DOCUMENT TYPE: Journal

LANGUAGE: French

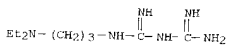
IT **23196-46-5P 23196-47-6P 23196-48-7P**
23196-49-8P 23196-50-1P 23199-15-7P
23199-16-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 23196-46-5 CAPLUS

CN Carbonic acid, compd. with 1-[3-(diethylamino)propyl]biguanide (1:1) (8CI) (CA INDEX NAME)

CM 1

CRN 45160-29-0
CMF C9 H22 N6



CM 2

CRN 463-79-6
CMF C H2 O3

RN 23196-47-6 CAPLUS

CN Biguanide, 1-[2-(dimethylamino)-1-methylethyl]-, dihydrochloride (8CI) (CA INDEX NAME)

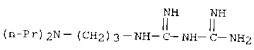
L10 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 23196-50-1 CAPLUS

CN Carbonic acid, compd. with 1-[3-(dipropylamino)propyl]biguanide (1:1) (8CI) (CA INDEX NAME)

CM 1

CRN 45204-86-2
CMF C11 H26 N6

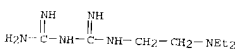


CM 2

CRN 463-79-6
CMF C H2 O3

RN 23199-15-7 CAPLUS

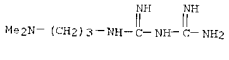
CN Biguanide, 1-[2-(diethylamino)ethyl]-, dihydrochloride (8CI) (CA INDEX NAME)



●2 HCl

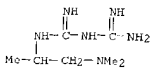
RN 23199-16-8 CAPLUS

CN Biguanide, 1-[3-(dimethylamino)propyl]-, trihydrochloride (8CI) (CA INDEX NAME)



●3 HCl

L10 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



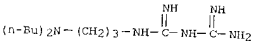
●2 HCl

RN 23196-48-7 CAPLUS

CN Carbonic acid, compd. with N-[3-(dibutylamino)propyl]imidodicarbonimidic diamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 41740-98-1
CMF C13 H30 N6



CM 2

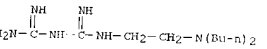
CRN 463-79-6
CMF C H2 O3

RN 23196-49-8 CAPLUS

CN Carbonic acid, compd. with 1-[2-(dibutylamino)ethyl]biguanide (1:1) (8CI) (CA INDEX NAME)

CM 1

CRN 45215-37-0
CMF C12 H28 N6



CM 2

CRN 463-79-6
CMF C H2 O3

L10 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L10 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AB Manufacture of R1O2CNR2(CH2)nNH-C(:NH)NHC(:NH)NH2 (I) useful as an antivirus drug is described. In an example, a mixture of 7.3 g. N-(carbethoxy)propylenodiamine-HNO3, 2.95 g. dicyandiamide, and 1 ml. H2O is heated 1.5 min. at 150° to give 4.1 g. I (R1 = Et, R2 = H, n = 3), m. 122-3.5° (decomposition) (aqueous EtOH). Similarly prepared are the following I (R1, R2, n, and m.p. nitrate salt given): Bu, H, 3, 113-16°; Me, Bu, 3, 108-10°; Et, Me, 3, 130-2°; Et, H, 2, 158-60°; Bu, H, 2, 119-21°; Et, H, 6, - (powdery).

ACCESSION NUMBER: 1969:412615 CAPLUS
DOCUMENT NUMBER: 71:12615
TITLE: Antiviral biguanides
INVENTOR(S): Ishida, Nakao; Katsube, Sumimoto; Saito, Shizuo; Kadota, Tadaomi
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd.
SOURCE: Jpn. Tokkyo Koho, 3 pp.
CODEN: JAXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

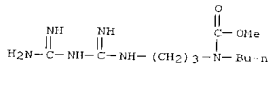
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 44005373	B4	19690306	JP	19661013

IT **24397-53-3P 24397-54-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 24397-53-3 CAPLUS
CN Carbamic acid, [3-(3-amidinoguanidino)propyl]butyl-, methyl ester, mononitrate (8CI) (CA INDEX NAME)

CM 1

CRN 45234-18-2
CMF C11 H24 N6 O2



CM 2

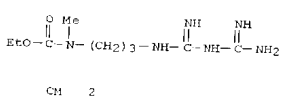
CRN 7697-37-2
CMF H N O3

RN 24397-54-4 CAPLUS
CN Carbamic acid, [3-(3-amidinoguanidino)propyl]methyl-, ethyl ester, mononitrate (8CI) (CA INDEX NAME)

L10 ANSWER 10 OF 12 CAPLUS COPYRIGH

CM 1

CRN 45204-09-9
CMF C9 H20 N6 O2



CM 2

CRN 7697-37-2
CMF H N O3

L10 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

AB cf. ibid. 39(9), 628-34(1962); CA 57, 12487d. New biguanide derivs., based on a partial structure of chlorhexidine, were synthesized as possible antiamebic agents. p-Iodophenylidicyanodiamide (I), m. 220° (picrate m. 170°), was obtained in 35% yield by diazotization of p-iodoaniline and subsequent reaction with dicyanodiamide (II). I with Me2N(CH2)5NH2 (0.01M) in absolute alc. at reflux after addition of 5 ml. concentrated HCl gave a 35% yield of N1-p-iodophenyl-N5-(3-dimethylaminopropyl)biguanide-2HCl, m. 217°. I with 3-diethylamino-, 3-piperidino-, and 3-morpholinopropylamines gave the corresponding biguanide-2HCl, m. 126°, 218°, and 215°, resp. I with benzylamine gave 38% N1-p-iodophenyl-N5-benzylbiguanide-HCl, m. 126°. II (0.1 mole) with 0.1 mole 4-methyl-phenylurea (III) (method A) in 50 ml. refluxing alc. after addition of HCl gave a 15% yield of N1-(4-methylphenyl)carbamoylbiguanide-HCl (IV), m. 220°. IV was obtained in 35% yield by melting II and III together (method B) after treating with HCl. An 80% yield of carbamoylbiguanide nitrate (V), m. 280° (picrate m. 280°), was obtained by refluxing 50 ml. aqueous (0.125M) urea nitrate and 0.1 mole dicyanodiamide. Thiocarbamoylbiguanide (VI), m. 280°, was similarly prepared from thiourea nitrate and dicyanodiamide in 85% yield. V (0.1 mole) refluxed with 0.1 mole p-toluidine-HCl in absolute ethanol (method C) after addition of 5 ml. concentrated HCl gave a 20% yield of IV (picrate m. 225°). Methods A and B gave 12 and 35% yields, resp., of N1-(4-methoxyphenyl)carbamoylbiguanide-HCl (VII), m. 280°, when II was treated with 4-methoxyphenylurea. VII prepared by method C was obtained in 15% yield from p-methoxyaniline and V. II with 4-acetamidophenylurea (method B) gave 40% yield of N1-(4-acetamidophenyl)carbamoylbiguanide-HCl, m. 280°. II with 2,4-dichlorophenylurea (method B) gave a 30% yield of N1-(2,4-dichlorophenyl)carbamoylbiguanide-HCl, m. 280°. Hydrogenation of 2,5-dimethoxy- and 3,4-dimethoxynitrobenzenes yielded, when isolated as the hydrochloride salts, resp., 2,5-dimethoxy-, 97%, m. 230° (picrate m. 173°), and 3,4-dimethoxyaniline hydrochlorides, 80%, m. 235° (picrate m. 175°). 4-Methylaniline in alc. ammonia with CS2 yielded NH4 4-methyldithiocarbamate, which was further treated with II to give 40% 4-methylphenylthiocarbamoyldicyanodiamide (VIII), m. 170°. Similar treatment of 4-methoxy-, 4-acetyl-, and 4-acetamidoanilines gave, resp., 4-methoxy-(IX) (50%, m. 210°), 4-acetyl-(X) (55%, m. 211°), and 4-acetamidophenylthiocarbamoyldicyanodiamide (XI), 45%, m. 212°. VIII refluxed in HCONMe2 with p-toluidine or 4-acetamidoaniline gave, resp., N1-(4-methylphenyl)thiocarbamoyl-N5-4-methylphenyl- (45%, m. 280°), and 4-acetamidophenylbiguanide hydrochloride, 50%, m. 280°. IX with 4-acetylaniline and 4-methoxyaniline gave, resp., N1-(4-methoxyphenyl)-thiocarbamoyl-N5-(4-acetylphenyl)biguanide-HCl, 50%, m. 280°, and N1-(4-methoxyphenyl)thiocarbamoyl-N5-(4-methoxyphenyl)biguanide-HCl, 50%, m. 280°. X with 4-acetylaniline and 4-acetamidoaniline gave, resp., N1-(4-acetylphenyl)thiocarbamoyl-N5-(4-acetylphenyl)biguanide-HCl, 60% m. 280°, and N1(4- acetylphenyl)thiocarbamoyl - N5-(4-acetamidophenyl)biguanide-HCl, 55%, m. 280°. XI with 4-acetamidoaniline and 4-methoxyaniline gave, resp., N1-(4-acetamidophenyl)thiocarbamoyl-N5-(4-acetamidophenyl)biguanide-HCl, 55%, m. 280°, and N1- (4-acetamidophenyl)thiocarbamoyl-N5-(4-methoxyphenyl) biguanide-HCl, 58% m. 280°. 4-Methylphenylsulfonyldicyanodiamide (XII) (50%, m. 235°) was obtained by refluxing 0.11 mole p-toluenesulfonyl chloride, 0.1 mole II, 0.15 mole NaOAc, and 25 ml. water for 2 hrs. II with 4-

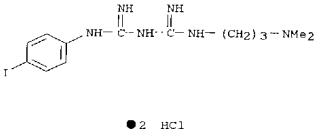
L10 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

chlorophenylsulfonyl chloride gave 4-chlorophenylsulfonyldicyanodi (XIII), 45%, m. 210°. II with 3,4-dimethoxyphenylsulfonyl chlorid gave 3,4-dimethoxyphenylsulfonyldicyanodiamide (XIV), 45%, m. 270° These arylsulfonyldicyanodiamides reacted with 0.01 mole appropria arylamine-HCl in water to yield N1-arylsulfonyl-N5-arylbiguanide hydrochlorides. Thus, XII with 4-bromo-, 4-iodo-, 4-methoxy-, and 4-methylaniline-HCl gave the resp. biguanide-HCl, m. 208°, 185°, 221°, and 280°. XIII with 4-methoxy-, 4-iodo-, 4-anifo-, and 3,4-dimethoxyaniline-HCl gave the resp. biguanide-HCl m. 165°, 201°, 280°, and 280°. XIV with 4-iodo-, 2,4-dichloro-, 2,5-dimethoxy-, and 3,4-dimethoxyaniline-HCl gave th resp. biguanide-HCl, m. >280°, 180°, 232°, and 260°. CaCN2 (10 g.) treated with CNBr (10 g. of 50% soln.) and subsequely with 2-methoxyaniline-HCl gave 55% N1,N5-bis(2-methoxyphenyl)biguanide-HCl, m. 182°. Similarly, the use of the appropriate arylamine-HCl gave N1,N5-bis(2,5-dimethoxyphenyl)-, 55%, m. 151°, -(2-chlorophenyl)-, 65%, m. 280°, -(2-hydroxyphenyl)-, 60% m. 280°, -(2-carboxyphenyl)-, 45% m. 280°, and -(2,4-dimethylphenyl)phenylbiguanide-HCl, 50%, m. 203°.

ACCESSION NUMBER: 1964:60568 CAPLUS
DOCUMENT NUMBER: 60:60568
ORIGINAL REFERENCE NO.: 60:10573e-h,10574a-d
TITLE: Possible antiamebic agents. XX. Synthesis of new biguanide derivatives
AUTHOR(S): Sen, A. B.; Gupta, S. K.
CORPORATE SOURCE: Univ. Lucknow
SOURCE: J. Indian Chem. Soc. (1963), 40(7), 578-84
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

IT **92111-06-3**, Biguanide, 1-[3-(dimethylamino)propyl]-5-(p-iodophenyl)-, dihydrochloride **98132-93-5**, Biguanide, 1-[3-(diethylamino)propyl]-5-(p-iodophenyl)-, dihydrochloride (preparation of)

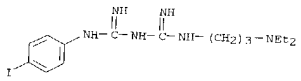
RN 92111-06-3 CAPLUS
CN Biguanide 1-[3-(dimethylamino)propyl]-5-(p-iodophenyl)-, di-hydrochloride (7CI) (CA INDEX NAME)



●2 HCl

RN 98132-93-5 CAPLUS
CN Biguanide, 1-[3-(diethylamino)propyl]-5-(p-iodophenyl)-, dihydrochloride (7CI) (CA INDEX NAME)

L10 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



●2 HCl

L10 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

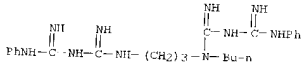
AB Organic compds. are stabilized against oxidation by use of about 0.01% of bis(biguanides) R2NHC(:NH)NHC(:NH)NH(A)NR5C(:NH)NHC(:NH)NR4R3 (Ia), where R2 and R3 are alkyl or aryl radicals, R4 and R5 are H or alkyl radicals having up to 5 C atoms, and A is a bifunctional group having 2-4 C atoms. Some of these compds. were prepared as follows. Ethylenebis(dicyandiamide) (19.4 g.) 23.6 g. o-toluidine (I), 22 g. concentrated HCl, 75 ml. H2O, and 25 ml. Cellosolve were refluxed 1 hr., the mixture was cooled, and a compound (II), m. 230° (decomposition), was recrystd. from H2O. II was dissolved in hot H2O, treated with Darco, filtered, and the filtrate was neutralized with NaOH. Crystallization from alc. gave ethylenebis (o-tolylbiguanide), m. 156-7° (decomposition). In the following Ia, the different reagents, the product, and the m.p. are listed: p-toluidi , ethylenebis(p-tolylbiguanide), 155°, (decomposition); aniline (III), ethylenebis(phenylbiguanide), 170°, (decomposition); nonylaniline, ethylenebis(nonylphenylbiguanide), aminohydroquinone diethyl ether, ethylenebis(2,5-diethoxyphenylbiguanide), 145-7° (decomposition); 3,5-dimethylaniline, ethylenebis(3,5-dimethylphenylbiguanide), 163° (decomposition); p-tert-amylaniline, ethylenebis(p-tert-amylphenylbiguanide), 110°; o-aminobiphenyl, ethylenebis(o-diphenylylbiguanide), softens at 65°; butylaniline, ethylenebis(butyl phenylbiguanide), 186-8°; tetramethylenebis(dicyandiamide (IV), tetramethylenebis(o-tolylbiguanide), 155°. IV (20.8 g.), 21.4 g. I, and 20 g. concentrated HCl and 75 ml. H2O were refluxed for 1 1/4 hrs. and then cooled in an ice bath to give 1,5-di(o-tolyl)biguanide HCl salt, m. 240-2°. On long standing the filtrate yielded trimethylenebis(o-tolylbiguanide) HCl salt, m. 135-40°. III (0.4 mole), 0.4 mole 37% HCl, and 100 ml. H2O were added to the oil obtained in the preparation of N-butyl-1,3-propylenebis(dicyandiamide), and the mixture was refluxed 1 hr. NaNO3 (0.2 mole) was added to one portion of the mixture; no product was obtained. The other portion was kept 2 days at room temperature to give N-butyl-1,3-propylenebis(phenylbiguanide) HCl salt, m. 110-20°. Use of these inhibitors in concentration of about 0.01% increased the induction period of a thermally cracked metal-free gasoline from 185 min. for untreated gasoline to 255-320 min. for treated gasoline, while the induction period of a gasoline containing 4 ppm. soluble Cu increased from 14 min. untreated to 119-151 min. treated. Soap discoloration was also decreased by use of 0.1% inhibitor.

ACCESSION NUMBER: 1957:56927 CAPLUS
DOCUMENT NUMBER: 51:56927
ORIGINAL REFERENCE NO.: 51:10572d-i
TITLE: Bis(biguanides) as stabilizing agents
INVENTOR(S): Kennerly, Geo. W.
PATENT ASSIGNEE(S): American Cyanamid Co.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2783210		19570226	US	

IT **119041-46-2**, Biguanide, 1-butyl-1,1'-trimethylenebis[5-phenyl-, hydrochloride
(preparation of)
RN 119041-46-2 CAPLUS

L10 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CN Biguanide, 1-butyl-1,1'-trimethylenebis[5 phenyl-, hydrochloride (6CI) (CA INDEX NAME)



● HCl

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COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	68.47	382.09

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-8.32	-8.32

STN INTERNATIONAL LOGOFF AT 18:14:17 ON 10 MAR 2004